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AUTHOR Baule, Steven M.; Lyons, Suzanne M.
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ABSTRACT

Because many schools face the difficult task of training teachers to use the Internet, this paper provides guidelines for planning and implementing an Internet training program for teachers. The first issue that must be addressed is defining goals and objectives by assessing the needs of the network users. Next, the various methods of Internet access must be defined and advantages and disadvantages of all the access options should be considered. Identifying who should be trained and defining the spectrum of proficiency to which they should be trained is the next step. Personnel, ideally teachers, must be designated to do the training and should make use of the wide array of resources available to them; these include print and online resources, workshops, conferences, and local users' groups. The three basic methods of organizing the training session content are: (1) show the entire spectrum of network tools; (2) focus on a single network tool; and (3) focus on a set of subject related resources valuable to the participants. The training program should take the form of a half day to 3 day workshops. Trainers should be prepared for the various learning styles of participants and they should also have some knowledge of adult learning theory. During the session itself, there should be a minimal amount of lecture, allowing for maximum hands-on opportunities. Trainers should provide participants with support materials at the conclusion of the training as well as the name of someone to contact for further help. Evaluation of the program by participants and instructors should take place at the end of the session on an individual basis. All those involved in the program should be recognized by the school's administration. (AEF)

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Planning For And Implementing Internet Training For Teachers

by Steven M. Baule and Suzanne M. Lyons

Introduction

Training teachers to be confident and proficient users of Internet resources is a difficult task facing many school districts. Because the nature of the Internet is one of constant evolution, defining the task of training in a systemic manner becomes difficult. In order to create a successful Internet training program, many factors must be taken into consideration.

It must be stipulated at the outset that no one person has enough extra time to provide all Internet training. In addition, it should be noted that no one person has enough skill to provide all training. Upon establishing these two factors, it is vital to have support for the program at the highest administrative level. Trainers should have release time in order to accomplish the tasks involved with training and, ideally, there should be staff members whose sole responsibility is the design and implementation of the training program. District level support should be based on the ongoing need for provision of Internet service to teachers. Teachers should have access to a building level support structure to assist them in utilizing network resources, even after they have participated in training activities. Without the network support infrastructure in place, the frustration level of users will rise and effective use of network and Internet resources will be marginal. Upon resolving the issue of district support of network access and training, a network mission statement should be formulated. Derived from this mission statement should be an implementation action plan to be updated annually.

Setting Goals and Objectives

The first issue that must be addressed when developing Internet training is defining goals and objectives for the training. Identifying these goals should begin by assessing the needs of the network users. Administrators and teachers should be asked what they would like to get from the Internet and how they will use it with students in the classroom. If they do not have the basic knowledge of what is available on the Internet, it is necessary to familiarize those individuals with the possibilities and assist them in identifying resources for curricular integration.

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Next, the various methods of Internet access must be defined. Two of the basic methods of access are dial-up connections and direct connection to an Internet host. Within each of these connectivity options are a variety of tools available to users. A number of interfaces are available to access these tools including text based systems, menu driven systems and graphical interfaces. Consider the advantages and disadvantages of all the access options. For example, command line or menu driven interfaces are less intuitive and more difficult to master. Therefore, more training and a higher level of user support is needed for these systems.

Training priorities must be set based on visualizing the school as a learning organization. Creating this learning organization involves not only the development of skills at the individual level but also the encouragement of independent learning as a lifelong process. It is, therefore, crucial to see that the development of human capital plays a role not only at the individual level but is also important to the growth and well being of the whole organization. A training program that is well-defined serves a dual role of fulfilling individual learning needs as well as enabling learning at the organizational level. This allows the organization to successfully adapt to an ever changing environment.

Identifying who should be trained and defining the spectrum of proficiency to which they should be trained is the next step. To some users, having an awareness of Internet resources is sufficient while other users may need to become very proficient in the use of the Internet. Differentiate the various needs of these users and set training priorities that correspond to them.

Training the Trainers

Upon identifying the goals and objectives of training, based on the physical access to the Internet and the needs of the users, personnel must be designated to actually do the training. These individuals must be motivated and, because of the perishable nature of the skills, they must have ongoing time and opportunities allotted to them to update their knowledge. Ideally, teachers themselves should be used as Internet trainers because they have classroom experience and can share ideas for curriculum integration. Students can also be valuable resources in management of training and network support. Providing students the opportunity to be contributing members of their educational community positively reinforces appropriate network use. Students often have more time, patience, and persistence when troubleshooting or searching for answers. Students and teachers together can form learning partnerships that can be beneficial to both parties (Black, 1995). When utilizing students as network support resources, make sure they have an adult contact to whom they can address questions and concerns about network use.

Trainers should be strongly encouraged and permitted to make use of the wide array of resources available to them. Print resources such as books and journals can be valuable as well as attending workshops, conferences, and local users' groups. Of particular interest to trainers is the variety of online resources. One such resource is the interactive workshop entitled "Navigating the Internet" (gopher://gopher.esu.edu:70/00/Help/net_stuff/training) by Richard Smith at the University of Southwestern Louisiana. This self paced course covers a wide variety of

Internet tools and can serve as a model for trainers to develop in house training.

Another method for trainers to keep abreast of issues is to subscribe to listservs devoted to the issues of Internet training such as the NETTRAIN listserv (LISTSERV@UBVM.CC.BUFFALO.EDU). David Passmore, a professor of education at Pennsylvania State University and founder of a TRDEV-L (LISTSERV@PSUVM.PSU.EDU), a training and development listserv notes some factors influencing people's use of a listserv. Listservs provide an enhanced sense of community by allowing people with similar interests and functions to interact. They can allow users to get information from other users on everything from products and services to discussions of the ethical issues of network use. Making use of the Internet as the medium for communication serves the function of providing an immediate response to requests for this information. Finally, listservs allow for a level playing field. There are no preconceived notions of an individual's position or job title, thus allowing for interaction at a much deeper level (Sorohan, 1994).

Trainers must also act as an advocate for teachers' use of the Internet. Trainers must realize that teachers have high expectations for using the Internet. Facilitating this use involves guiding teachers into visualizing the Internet as one of many resource tools available for teaching.

The Training Sessions

After trainers have been established and are sufficiently prepared to conduct training, the training sessions themselves must be developed. As a rule, training sessions should be ongoing and constant. The three basic methods of organizing content are:

- show the entire spectrum of network tools.
- focus on a single network tool (e.g., Netscape).
- focus on a set of subject related resources valuable to the participants.

When training on a range of Internet tools, the training program should take the form of a half day to three day workshops. In this workshop model, there is intense exposure to the tool and should include a "hands on" opportunity to give participants experience in using the Internet. The disadvantage to such training is that the participants often feel overwhelmed at the magnitude of information they are receiving. An alternate approach to training is the use of a progressive model. Taking place over several weeks, participants are given the opportunity to practice skills between meetings and focus on areas of specific interest to them. A disadvantage here is that a good overview of the Internet may not be presented and participants must draw the parts of the Internet into a cohesive whole on their own (Black, 1995).

When scheduling short training sessions, they should be held multiple times throughout the day to accommodate as many schedules as possible. The student to instructor ratio should be 12 to 1 or less, especially if hands on opportunities are available. Ideally these sessions should range between one and one half hour in length. Not all sessions need to allow for hands on opportunities. Utilizing

demonstrations or introductory presentations can be powerful motivators and can be used in settings such as teacher inservices and faculty meetings. In addition to scheduling school year training, examine the possibility of summer sessions when the teachers' time is less hectic.

Prior to the session, the trainer should know the background of the audience and tailor objectives to match the composition of the class. These objectives should be clearly outlined and presented to participants at the onset and participants should have the opportunity to match their expectations to those of the trainer (Makulowich, 1994).

Trainers should be prepared for the various learning styles of participants and they should also have some knowledge of adult learning theory. One of the basic concepts of adult learning is that adults are responsible for their own learning experiences. Once they see the need for learning they will participate in it. Trainers should use a constructivist approach to training and build on what people already know from life experience. As in any teaching situation, the focus should be on the learner (Hert, 1994).

During the session itself, there should be a minimal amount of lecture, allowing for maximum hands on opportunities. An overview of the Internet should be offered and, even in introductory sessions, the trainer should show the complexity of the Internet to some extent in order to display the richness of the tool. Users often find the Internet overwhelming and disorganized. Presenting an overview of what is available and how the connections are made can give participants a more global perspective of the way the Internet works. When teaching the technical skills involved in using Internet tools, the trainer should intersperse a variety of practical tips and techniques, including personal anecdotes of successes and failures. This can help participants focus on the actual utilization of the tool rather than strictly on the mechanics of how it operates. The participants can also be encouraged to work in pairs or small teams. This provides a less intimidating atmosphere for reluctant users and also allows for cooperative learning.

Flexibility during training sessions is a requirement for providing quality instructions. Trainers should be prepared for technical glitches by having prior sessions saved on transparencies. A scripted session can sometimes be limiting when faced with failed network connections. Sometimes, a "live approach" is a more useful method, even if problems occur because participants can learn as much from mistakes as from successes (Page, 1994).

Trainers should provide participants with support materials that they can take away with them at the conclusion of the training. These materials should provide methodical instructions and should support the training that takes place during the sessions. This way, participants can have something to look back on to remind them of key concepts. The documentation can also contain troubleshooting tips and some more advanced concepts for those who wish to expand their knowledge base. In addition to materials produced in house, the trainer can also present recent journal articles and books that would be of interest. Of course, all materials should be accurate and as timely as possible. Because the Internet is always changing, it is essential that materials be reviewed and updated in a timely manner in order to be useful as

learning tools.

Participants should always leave a training session with the name of someone to contact for further help or to assist in problem solving. Again, the idea of ongoing and continual support is vital to the success of the training program. Users will not reach their full potential if they are not productive in their use of the Internet. After the training sessions have been completed, the instructor should have further contact with participants to make sure that the training has met the need.

Evaluation

The success of a training program lies in the value placed on the evaluation of the program, both by participants and instructors. Seeking honest, forthright information regarding the training is important and utilizing this information to improve the training is necessary. Working with the knowledge that the Internet is constantly evolving, those involved in the planning process for training must also be committed to the need for updating and fine tuning instructional goals of training. Assessment should take into account not only whether goals and objectives were met but also measure the success of the process itself. Questions should be raised about the transfer and application of learning to the participant's job within the school. Did the learning have an effect on the functioning of the organization, based on the participant's experiences?

Evaluation should take place at the end of the session on an individual basis in order to ascertain how each individual responded to the learning environment. Evaluations can then be examined as a group to assess the success of the process of training. Participants should be contacted with follow up questions after a period of time. This period of reflection can determine if the learning was long term or if the training program needs to focus on skills that seemed to fade over time.

In addition to being satisfied on a personal level, all individuals who took part in training, whether trainer, participant, or technical support should be recognized by the school's administration. Recognition substantiates the training program and gives it validity among all school employees. Providing a well developed, well thought out training program will ensure the productive use of the Internet and its integration into the educational program.

References

Black, L. (1995). Observations from the Boulder Valley Internet Project. *T.H.E. Journal, 22(10)*, pp. 75-80.

Hert, C.A. (1994). A learning organization perspective on training: critical success factors for Internet implementation. *Internet Research, 4(3)*, pp. 36-40.

Makulowich, J.S. (1994). Tips on how to teach the Internet. *ONLINE, 18(6)*, pp. 27-30.

Page, M. & Kesselman, M. (1994). Teaching the Internet: challenges and opportunities. *Research Strategies, 12(3)*, pp. 157-167.

Sorohan, E.G. (1994). Trainers on the network: an interview with David Passmore. *Training and Development*, pp. 35-37.